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cc Dan Wall/EPR/R8/USEPA/US@EPA,
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bcc

Subject follow-up on items for NRDA/CERCLA response info at
Richardson Flat

Hi Kathy-

I just wanted to touch bases with you on a few things that came up during the FWS' discussion with Kerry Gee at United Park regarding the NRDA process a couple of weeks ago.

At that meeting, we discussed the range of possible remedial responses (and accompanying natural resource issues) for the wetland area on top of the tailings impoundment. As you may or may not know, depending on how much time you've had to review the RI/FS, this wetland is "pretty good sized" -- but has not been delineated-- and has had pretty consistent value as nesting/foraging habitat for a variety of waterfowl, shorebird and other species, notably including Sandhill Cranes, which have consistently nested and hatched young in the Richardson area over the last couple of years.

This wetland was not addressed in the RI/FS investigation, presumably because of the assumption that it would be filled when the cap was improved on the repository. I think one of the other assumptions of the RI/FS was that the wetland would need to go, because it would form a pathway by which water could possibly weaken the "dam" (wedge buttress, embankment, etc-- I'm not sure what its correct name is) on the down-gradient end of the impoundment (and that this water, after percolating through tailings, would probably have an adverse impact on the floodplain wetland at the toe of the embankment). As I understand it, there is currently at least one seep occurring in the wall of the embankment, although according to Jim Fricke, the amount that gets through is on the order of 10-50 gallons/day.

What is known about the wetland on the impoundment from the RI sampling is that on its margins, the tailings cover thins to less than 6", and lead concentrations (and those of other tailings-associated metals) begin to climb up into the range seen in bare tailings. However, concentrations and soil cover through the interior of the wetland are uncharacterized.

Another data gap of note with respect to the RI/FS is that the wetland was never delineated or assessed for the purposes of mitigation under Section 404 of the Clean Water Act (assuming that the wetland would need to be filled as part of the response action, with consequent mitigation under CWA Sec 404 as a CERCLA ARAR).

During the FWS' discussion with United Park a couple of weeks ago, we discussed the potential for the remedial action to include retaining the wetland on top of the impoundment to minimize injuries to natural resources during the CERCLA response action. While this does not speak to the possibility that natural resources may be experiencing ongoing injury due to exposure to tailings in the wetland, the FWS agrees that keeping the wetland on top of the repository may be a valid action as long as it a) is consistent with the overall goals of the remedial response, and b) can be remediated in a manner that will bring ecological exposure into acceptable levels, and c) upon completion of remediation, would no longer be a potential source of NR injury.

Concurrently with this email, I am contacting Kerry to follow up on the sampling we discussed during the meeting, but I have some concerns regarding whether or not the wetland should be left on top of the impoundment at all that I think are most appropriate to discuss with you. Although UPCM is likely to be able to provide existing data to evaluate the long-term stability of the embankment with the wetland as a potential water (seepage) source, I think that the evaluation itself should be done by EPA (or an EPA contractor) because 1) I think the decision requires some input from someone who is qualified to assess the stability of the embankment with the wetland in place (i.e., a structural engineer?), and 2) UPCM shouldn't do the assessment (or at least if they do the assessment it should be reviewed by an EPA engineer) because they are not impartial in this matter. At least part of UPCM's success in working with EPA on the Richardson site has been that they have been willing to provide data and let EPA make the decisions (i.e., how a PRP-funded investigation is supposed to go). Above all, I don't think that the proper answer to "what to do about the wetland" is "whatever UPCM and the FWS decide"-- neither one of is qualified, for different reasons.

I look forward to discussing this further with you-- please give me a call when you get back to the office or when you get a moment. I will be in all week this week, but will be out the first half of next week (helping Mo and Kari with sampling on lower Silver Creek). Dan Wall is also going to be out of the office until the middle of next week-- maybe we can arrange a phone call for thursday or friday next week.

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